



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,365	11/12/2003	Johannes Becker	BECKER 1	6816
47396	7590	08/08/2008	EXAMINER	
HITT GAINES, PC			DEBNATH, SUMAN	
LSI Corporation			ART UNIT	
PO BOX 832570			PAPER NUMBER	
RICHARDSON, TX 75083			2135	
			NOTIFICATION DATE	DELIVERY MODE
			08/08/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket@hittgaines.com

Office Action Summary

Application No.

10/706,365

Applicant(s)

BECKER, JOHANNES

Examiner

SUMAN DEBNATH

Art Unit

2135

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-11, 13-18 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-11, 13-18 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-4, 6-11, 13-18 and 20 are pending in this application.
2. Claims 5, 12 and 19 were previously cancelled.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

Claim Objections

4. Claims 1 and 15 are to for lack of antecedent basis:
Claim 1 recites "the group consisting of:" in line 4.
Claim 15 recites "the group consisting of" in line 5.
Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. Claims 1-4, 8-11 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mack et al. (Patent No.: US 5,689,516) and further in view of Kalkunte et al. (Patent No.: US 5,515,523).
6. As to claim 1, Mack teaches for use with an integrated circuit (IC) having a testing port, a system for securing said IC as against subsequent reprogramming, comprising: port inhibit circuitry located on said IC and modifiable to achieve a configuration that determines an extent to which said testing port is enabled (abstract, FIG. 1, col. 3, lines 25-40), said extent selected from the group consisting of: fully

Art Unit: 2135

enabled, and completely disabled; and port access circuitry, coupled to said testing port, that enables said testing port based on said configuration (FIG.1, col. 3, lines 25-40, col. 6, lines 5-18 and lines 55-65, col. 7, lines 10-25). Mack is silent on said extent selected from the group consisting of: only partially disabled. However, Kalkunte teaches said extent selected from the group consisting of: only partially disabled (abstract, FIG. 2, col. 6, lines 4-13). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Mach as taught by Kalkunte in order to "maximize efficient use of the memory component and minimized starvation of other memory ports, without requiring higher performance memory components or wider memory bus widths (Kalkunte, col. 2, lines 55-60)."

7. As to claims 8 and 15, these are rejected using the same rationale as for the rejection of claim 1.
8. As to claim 2, Mark teaches wherein said testing port is a Joint Test Action Group (JTAG) port (col. 3, lines 25-40).
9. As to claims 9 and 16, these are rejected using the same rationale as for the rejection of claim 2.
10. As to claim 3, Mark teaches wherein said port inhibit circuitry comprises an inhibit bit in a one-time programmable register (col. 6, lines 5-18).

Art Unit: 2135

11. As to claims 10 and 17, these are rejected using the same rationale as for the rejection of claim 3.

12. As to claim 4, Mark teaches wherein said port inhibit circuitry is configured to be permanently modified prior to delivering said IC to a user thereof (col. 6, lines 13-18, col. 7, lines 10-25).

13. As to claims 11 and 18, these are rejected using the same rationale as for the rejection of claim 4.

14. Claims 6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mack in view of Kalkunte and further in view of Bos et al. (Patent No.: US 7,124,340 B1).

15. As to claim 6, neither Mack nor Kalkunte explicitly disclose wherein said testing port comprises a direct loopback between input and output pins thereof. However, Bos discloses wherein the testing port comprises a direct loopback between input and output pins thereof (column 7, lines 60-67 and column 8, lines 1-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Mack nor Kalkunte as taught by Bos in order to isolate defects within the circuit by supporting loopback testing.

16. As to claim 13, it is rejected using the same rationale as for the rejection of claim 6.

17. Claims 7, 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mack in view of Kalkunte and further in view of Hansford (Patent No.: US 6,522,100 B2).

18. As to claim 7, neither Mack nor Kalkunte explicitly disclose wherein said IC is a baseband chip of a mobile communication device. However, Hansford discloses wherein the IC is a baseband chip of a mobile communication device (column 1, lines 45-65).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Mack nor Kalkunte as taught by Hansford in order to receive a frequency signal or frequency information.

19. As to claims 14 and 20, these are rejected using the same rationale as for the rejection of claim 7.

20. Examiner's note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures

Art Unit: 2135

may be applied as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Response to Arguments

21. Applicant's arguments filed April 09, 2008 have been fully considered but they are not persuasive.

In response to applicant's argument that: "The invention as presently claimed, however, is not concerned with maximizing efficient use of a memory component but, rather, eliminating access to a memory or other component.", the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Applicant argues that: "the Applicant fails to find where Kalkunte is concerned with the extent to which a testing port is partially disabled, but rather a memory port."

Examiner maintains that: Mack teaches main invention by disclosing an integrated circuit (IC) having a testing port, a system for securing said IC as against subsequent reprogramming, comprising: port inhibit circuitry located on said IC and

modifiable to achieve a configuration that determines an extent to which said testing port is enabled (abstract, FIG. 1, col. 3, lines 25-40), said extent selected from the group consisting of: fully enabled, and completely disabled; and port access circuitry, coupled to said testing port, that enables said testing port based on said configuration (FIG.1, col. 3, lines 25-40, col. 6, lines 5-18 and lines 55-65, col. 7, lines 10-25). Examiner recognizes that Mack is silent on achieving a configuration where said testing port is partially disabled. Given a broader interpretation, one with ordinary skill in the art would interpret that when a port is partially disabled, certain functionality is still enabled where user can still make changes to certain functionality. Examiner asserts that Kalkunte is an analogous art and it teaches the same functionality by partially disabling a port (col. 6, lines 4-13, "...partially disables the memory transfers with but B interface 40 (106). When but B interface 40 is partially disabled (106), a predetermined number of requests from bus A interface 30 will be granted."). Therefore, someone with ordinary skilled in the art could modify the teaching of Mack's testing port by partially disabling port as taught by Kalkunte.

In response to applicant's argument that "modifying Mack with Kalkunte would render Mack unsatisfactory for its untended use", a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, and then it meets the claim. Someone with ordinary skilled in the art would interpret when a port is "only

partially disabled"; certain functionality still would be enabled where user/system can still make changes to certain functionality. Furthermore, when "completely disabled" is selected from the group, no changes would be allowed and such a selection of completely disabling testing port is taught by Mack (col. 7, lines 10-25, "JTAG test circuitry 180 to remain reset (i.e. disabled)...").

Conclusion

22. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suman Debnath whose telephone number is 571 270 1256. The examiner can normally be reached on 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on 571 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. D./
Examiner, Art Unit 2135

/KimYen Vu/

Supervisory Patent Examiner, Art Unit 2135